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| **□ 수행평가 – 커넥티드 카 스마트 패드 및 사용자 컨트롤러 구축을 위한 안드로이드 프로그래밍** | | | | |
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| **과정명** | | [4차산업 선도인력]커넥티드 카를 위한 IoT 전문가 과정(NCS) | | |
| **능력단위명** | | 커넥티드 카 스마트 패드 및 사용자 컨트롤러 구축을 위한 안드로이드 프로그래밍 | **훈련교사** | 이진만 |
| **능력단위요소명** | | 안드로이드 기본 구조 및 특징 이해  위젯 이해 및 응용  실습 프로젝트 | | |
| **수행날짜** | | 2018.04.12 | 훈련생명 | 백상우 |
| **과제개요** | | | | |
| 1. 안드로이드 화면 구성  2. 안드로이드 기본 위젯 다루기  3. 안드로이드 고급 위젯 다루기  4. 안드로이드 서버 연동 | | | | |

1. 화면구성

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| 홈 화면 | 회원가입 | 로그인 |

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| 분석 (서버연동) | 네이버 (웹뷰) |

1. Layout

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| activity-main.xml |
| *<?***xml version="1.0" encoding="utf-8"***?>* <**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:app="http://schemas.android.com/apk/res-auto"  xmlns:tools="http://schemas.android.com/tools"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:background="@drawable/bg17"  android:orientation="vertical"  tools:context=".MainActivity"**>   <**LinearLayout  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:orientation="horizontal"**>   <**Button  android:id="@+id/bt\_home"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_weight="1"  android:onClick="clickBtn"  android:text="HOME"** />   <**TextView  android:id="@+id/tx\_time"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_weight="1"  android:text="TextView"  android:textAlignment="center"  android:textStyle="bold"** />   </**LinearLayout**>   <**FrameLayout  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:background="@drawable/bg17"**>   <**WebView  android:id="@+id/wv"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"** />   <**Button  android:id="@+id/bt\_naver"  android:layout\_width="match\_parent"  android:layout\_height="150dp"  android:layout\_gravity="bottom"  android:background="@drawable/bt\_naver"  android:onClick="clickBtn"** />   <**LinearLayout  android:id="@+id/ll"  android:layout\_width="match\_parent"  android:layout\_height="413dp"  android:background="@drawable/bg17"  android:orientation="horizontal"**>   <**LinearLayout  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:layout\_weight="1"  android:orientation="vertical"**>   <**Button  android:id="@+id/bt\_apply"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:layout\_weight="1"  android:onClick="clickBtn"  android:text="회원가입"** />   <**Button  android:id="@+id/bt\_login"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:layout\_weight="1"  android:onClick="clickBtn"  android:text="로그인"** />   </**LinearLayout**>   <**Button  android:id="@+id/bt\_analy"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:layout\_weight="1"  android:onClick="clickBtn"  android:text="분석"** />   </**LinearLayout**>   <**RelativeLayout  android:id="@+id/rl\_apply"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"**>   <**TextView  android:id="@+id/ID\_apply"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentStart="true"  android:layout\_alignParentTop="true"  android:layout\_marginStart="75dp"  android:layout\_marginTop="108dp"  android:text="ID"  android:textSize="18dp"** />   <**TextView  android:id="@+id/PWD\_apply"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentTop="true"  android:layout\_alignStart="@+id/ID\_apply"  android:layout\_marginTop="198dp"  android:text="PWD"  android:textSize="18dp"** />   <**EditText  android:id="@+id/tx\_applyid"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignBaseline="@+id/ID\_apply"  android:layout\_alignParentEnd="true"  android:layout\_marginEnd="38dp"  android:ems="10"  android:hint="Input your ID"  android:inputType="textPersonName"** />   <**EditText  android:id="@+id/tx\_applypw"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignBaseline="@+id/PWD\_apply"  android:layout\_alignStart="@+id/tx\_applyid"  android:ems="10"  android:hint="Input your PWD"  android:inputType="textPersonName"** />   <**Button  android:id="@+id/bt\_doapply"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentBottom="true"  android:layout\_centerHorizontal="true"  android:layout\_marginBottom="162dp"  android:onClick="clickBtn"  android:text="가입"** />  </**RelativeLayout**>   <**RelativeLayout  android:id="@+id/rl\_login"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"**>   <**TextView  android:id="@+id/ID\_login"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentStart="true"  android:layout\_alignParentTop="true"  android:layout\_marginStart="75dp"  android:layout\_marginTop="108dp"  android:text="ID"  android:textSize="18dp"** />   <**TextView  android:id="@+id/PWD\_login"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentTop="true"  android:layout\_alignStart="@+id/ID\_login"  android:layout\_marginTop="198dp"  android:text="PWD"  android:textSize="18dp"** />   <**EditText  android:id="@+id/tx\_loginid"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignBaseline="@+id/ID\_login"  android:layout\_alignParentEnd="true"  android:layout\_marginEnd="38dp"  android:ems="10"  android:hint="Input your ID"  android:inputType="textPersonName"** />   <**EditText  android:id="@+id/tx\_loginpw"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignBaseline="@+id/PWD\_login"  android:layout\_alignStart="@+id/tx\_loginid"  android:ems="10"  android:hint="Input your PWD"  android:inputType="textPersonName"** />   <**Button  android:id="@+id/bt\_dologin"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_alignParentBottom="true"  android:layout\_centerHorizontal="true"  android:layout\_marginBottom="162dp"  android:onClick="clickBtn"  android:text="로그인"** />  </**RelativeLayout**>   </**FrameLayout**> </**LinearLayout**> |

1. Java

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| MainActivity.java |
| **package** com.example.student.p230;  **import** android.support.v7.app.AppCompatActivity; **import** android.os.Bundle; **import** android.view.View; **import** android.webkit.WebView; **import** android.webkit.WebViewClient; **import** android.widget.Button; **import** android.widget.EditText; **import** android.widget.LinearLayout; **import** android.widget.RelativeLayout; **import** android.widget.TextView; **import** android.widget.Toast;  **import** java.sql.Timestamp; **import** java.text.SimpleDateFormat; **import** java.util.Date;  **public class** MainActivity **extends** AppCompatActivity {  LinearLayout **ll**;  RelativeLayout **rl\_apply**,**rl\_login**;  Button **bt\_naver**;  WebView **wv**;  EditText **tx\_loginid**, **tx\_loginpw**, **tx\_applyid**, **tx\_applypw**;  String **id**=**""**;  String **pwd**=**""**;  TextView **tx\_time**;  @Override  **protected void** onCreate(Bundle savedInstanceState) {  **super**.onCreate(savedInstanceState);  setContentView(R.layout.***activity\_main***);  makeUI();  getTime();  }  **public void** makeUI(){  **ll**=findViewById(R.id.***ll***);  **bt\_naver**=findViewById(R.id.***bt\_naver***);  **wv**=findViewById(R.id.***wv***);  **rl\_apply**=findViewById(R.id.***rl\_apply***);  **rl\_login**=findViewById(R.id.***rl\_login***);    **wv**.getSettings().setJavaScriptEnabled(**true**);   **wv**.setVisibility(View.***INVISIBLE***);  **rl\_apply**.setVisibility(View.***INVISIBLE***);  **rl\_login**.setVisibility(View.***INVISIBLE***);  **ll**.setVisibility(View.***VISIBLE***);  **bt\_naver**.setVisibility(View.***VISIBLE***);   **wv**.setWebViewClient(**new** WebViewClient());    }  **public void** getTime(){  **tx\_time**=findViewById(R.id.***tx\_time***);    Thread thread = **new** Thread(){  **public void** run(){  **while**(!isInterrupted()){  runOnUiThread(**new** Runnable() {  @Override  **public void** run() {  SimpleDateFormat sdf = **new** SimpleDateFormat(**"yyyy-MM-dd HH:mm:ss"**);  Date d = **new** Date();  String time = sdf.format(d);  **tx\_time**.setText(time);  }  });  **try**{  Thread.*sleep*(1000);  }**catch** (InterruptedException e){  e.printStackTrace();  }  }  }  };   thread.start();   }  **public void** clickBtn(View v){  **if**(v.getId()==R.id.***bt\_home***){  *//Intent intent = new Intent(getApplicationContext(), MainActivity.class);  //makeUI();  //startActivity(intent);* **wv**.setVisibility(View.***INVISIBLE***);  **rl\_apply**.setVisibility(View.***INVISIBLE***);  **rl\_login**.setVisibility(View.***INVISIBLE***);  **ll**.setVisibility(View.***VISIBLE***);  **bt\_naver**.setVisibility(View.***VISIBLE***);  } **else if**(v.getId()==R.id.***bt\_naver***){  **wv**.setVisibility(View.***VISIBLE***);  **wv**.loadUrl(**"http://www.naver.com"**);  **ll**.setVisibility(View.***INVISIBLE***);  **bt\_naver**.setVisibility(View.***INVISIBLE***);  **rl\_apply**.setVisibility(View.***INVISIBLE***);  **rl\_login**.setVisibility(View.***INVISIBLE***);  } **else if**(v.getId()==R.id.***bt\_apply***){  **wv**.setVisibility(View.***INVISIBLE***);  **rl\_apply**.setVisibility(View.***VISIBLE***);  **ll**.setVisibility(View.***INVISIBLE***);  **bt\_naver**.setVisibility(View.***INVISIBLE***);  **rl\_login**.setVisibility(View.***INVISIBLE***);  } **else if**(v.getId()==R.id.***bt\_analy***){  **wv**.setVisibility(View.***VISIBLE***);  **wv**.loadUrl(**"http://70.12.114.153/mv/main.do"**);  **ll**.setVisibility(View.***INVISIBLE***);  **bt\_naver**.setVisibility(View.***INVISIBLE***);  **rl\_apply**.setVisibility(View.***INVISIBLE***);  **rl\_login**.setVisibility(View.***INVISIBLE***);  } **else if**(v.getId()==R.id.***bt\_login***){  **wv**.setVisibility(View.***INVISIBLE***);  **rl\_apply**.setVisibility(View.***INVISIBLE***);  **ll**.setVisibility(View.***INVISIBLE***);  **bt\_naver**.setVisibility(View.***INVISIBLE***);  **rl\_login**.setVisibility(View.***VISIBLE***);  }   **else if**(v.getId()==R.id.***bt\_dologin***){  getLoginID();  }  **else if**(v.getId()==R.id.***bt\_doapply***){  getApplyID();  }  }   **public void** getApplyID(){   **tx\_applyid** = findViewById(R.id.***tx\_applyid***);  **tx\_applypw** = findViewById(R.id.***tx\_applypw***);  **id** = **tx\_applyid**.getText().toString();  **pwd** = **tx\_applypw**.getText().toString();  **if**(**id**!=**null** && !**pwd**.equals(**""**)) {  **tx\_applyid**.setText(**""**);  **tx\_applypw**.setText(**""**);  Toast.*makeText*(**this**, **"가입완료 : "** + **id** + **" "** + **pwd**, Toast.***LENGTH\_SHORT***).show();  }**else**{  Toast.*makeText*(**this**, **"다시 입력해주세요."** + **pwd**, Toast.***LENGTH\_SHORT***).show();  }   }  **public void** getLoginID(){  **tx\_loginid**=findViewById(R.id.***tx\_loginid***);  **tx\_loginpw**=findViewById(R.id.***tx\_loginpw***);  String testid = **tx\_loginid**.getText().toString();  String testpw = **tx\_loginpw**.getText().toString();  *//Toast.makeText(this, id+" "+pwd,Toast.LENGTH\_SHORT).show();* **if**(testid.equals(**id**) && testpw.equals(**pwd**)){  Toast.*makeText*(**this**,**"로그인 성공"**, Toast.***LENGTH\_SHORT***).show();  }  **else**{  Toast.*makeText*(**this**,**"로그인실패”**, Toast.***LENGTH\_SHORT***).show();  }  } } |